

Case Study: BostonColocation



Vyatta Delivers High Availability, High Performance, and Low Cost to Colocation Facility

BostonColocation, located in suburban Boston, Massachusetts, offers shared and dedicated colocation environments to accommodate its customers' most demanding mission-critical applications.

BostonColocation.net

Challenge

Find highly reliable, economical BGP router

Solution

Vyatta Open Networking Software

Benefits

High level of reliability
Solid performance
Cost-Effective

Challenge

BostonColocation had been operating a Providence colocation facility. It then acquired several colocation firms in the Boston area. To consolidate the disparate operations, BostonColocation relocated them within CRG West's Boston-Somerville data center. Because CRG is carrier neutral and does not sell bandwidth, BostonColocation saw an opportunity. It established a point of presence (POP) within the data center to offer its customers, as well as CRG's, smaller amounts of bandwidth.

BostonColocation needed routers with Border Gateway Protocol (BGP) capabilities to route traffic across multiple telecommunications providers. "Reliability, cost, and space were all issues," Says Jim Archer, president of BostonColocation. "We had been using Cisco routers at our Providence location, but I didn't want to purchase a number of new routers at Cisco prices, so the search was on to find routers that provided high availability, were affordable, and also had a small footprint."

Solution

After briefly considering routers from Netopia/Motorola and Juniper, BostonColocation discovered Vyatta open networking appliances. Vyatta solutions combine enterprise-class routing and security with the performance and economics of open systems, giving network administrators the ability to innovate, scale, and grow in ways that were previously unavailable. Vyatta offered a solution that was reliable, affordable, and compact.

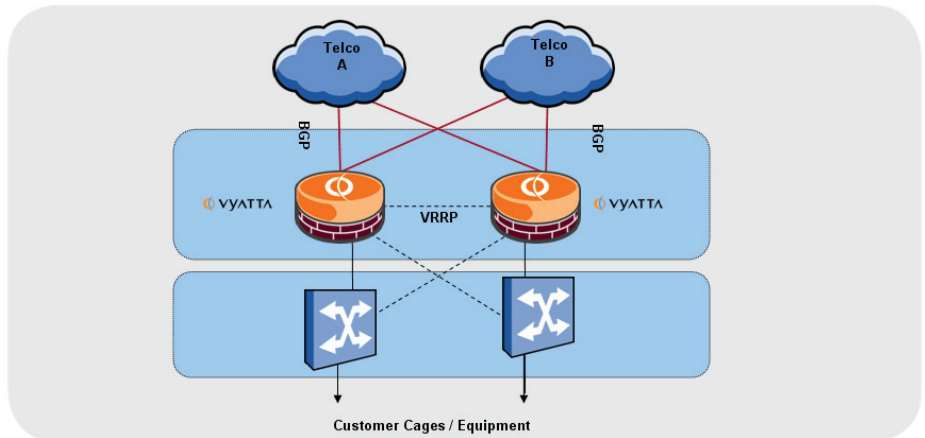
BostonColocation set up a trial of the Vyatta router software in a lab environment at its Providence location in October 2007. "We downloaded the software and beat the heck out of it for nearly a month," says Archer. One of Archer's initial concerns was throughput. "We moved well in excess of 800 Mbps in a test. It probably could have gone faster, but we couldn't generate any more traffic. And that was with lower-end hardware than we were planning to buy."

To further test the Vyatta router, Archer deployed it in the production environment at the Providence facility for several more weeks. The Vyatta was configured as the primary router together with a Cisco 7206 as the backup. The pair were configured with Virtual Router Redundancy Protocol (VRRP), providing automatic failover should the Vyatta router go down for any reason. "It never went down," says Archer. "And in fact, the two of them worked very well together. At that point we stopped looking for a router."

"The most important thing we provide our customers is connectivity. With Vyatta routers we have had no reliability issues. Vyatta gave us stability at a substantial savings."

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BostonColocation deployed the Vyatta software at its Somerville site in early December 2007. “We racked the hardware, programmed the Vyatta software, and it worked just as expected the first time.” BostonColocation installed the Vyatta software on two SuperMicro SuperServer Barebone 1U server systems. “I liked the fact that I could run the Vyatta software on whatever commodity hardware I needed to,” says Archer.”

Reliability is very important so Archer installed two Vyatta BGP routers with VRRP for automatic failover. All the circuits from two Cisco switches connect to both Vyatta routers, and the switches are also cross-connected. “We can’t tolerate any downtime,” says Archer. “That’s why we’ve built in so much redundancy. So far, the Vyatta routers have not created a second of downtime.”

That’s not to say that failures haven’t occurred. “We’ve had telecom circuits go down, but the Vyatta failover worked exactly as designed. Our customers have never once noticed when that’s happened.”

Reliable operation has been accompanied by superior support. “Whenever I’ve called Vyatta, I’ve received very prompt responses,” says Archer. “The support has been excellent. For example, I once asked how many VLANs Vyatta could support. One of the technicians actually set up an environment in his lab and tested that. We bought the 24/7 support, but we haven’t had an occasion to use that yet.”

Benefits

BostonColocation sells mission-critical space. “The most important thing we provide our customers is connectivity. With Vyatta

routers we have had no reliability issues. Vyatta gave us stability at a substantial savings.”

In addition, Vyatta has delivered solid performance. “With modest, off-the-shelf hardware, Vyatta has performed every bit as well as the Cisco 7200s in our Providence facility.”

Even though BostonColocation purchased hardware above and beyond what they needed, Archer still estimates that he spent less than a quarter of what it would have cost him for a Cisco solution.